

ABSTRACT OF JP 52062314

L14 ANSWER 3 OF 3 CA COPYRIGHT 2003 ACS on STN
 AN 87:137639 CA
 TI Synthetic zeolites for **detergent** builders
 IN Sugawara, Yujiro; Nakazawa, Tadahisa; Usui, Koichi; Nato, Hiroyuki;
 Ogawa,
 Masahide
 PA Mizusawa Industrial Chemicals, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 22 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC C11D003-08
 CC 46-6 (Surface Active Agents and Detergents)
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 52062314	A2	19770523	JP 1975-137813	19751118
	JP 55018277	B4	19800517		
PRAI	JP 1975-137813		19751118		

AB **Smectite**-type clay is **treated** with **acid**
 until the x-ray diffraction peaks from (001) disappear and the Al₂O₃:SiO₂
 molar ratio reaches 1:11-99, ground to size distributions of >20 wt.%
 <5.μ. and <30% >20 .μ., Al₂O₃ and Na₂O added to satisfy zeolite
 compns.,

and heated to give zeolites having size distributions of >40% <5 .μ. and
 <30% >8 .μ., which were useful as **detergent** builders. Thus,
 76.5 g acidic white clay (SiO₂ 72.1, Al₂O₃ 14.2, Fe₂O₃ 3.87, MgO 3.25,

and
 CaO 1.06%) was treated 10 h with 200 mL of 50% H₂SO₄ at 90.degree.,
 washed

with H₂O, dispersed in H₂O, beaten 20 min in a blender to give a powder
 contg. 48.3% <5-μ.-diam and 51.7% 5-20 .μ.-diam. particles having no
 x-ray defraction from (001). Na aluminate and NaOH were added to a

slurry
 of the above powder to make the molar ratios of Na₂O-SiO₂, SiO₂-Al₂O₃,

and
 H₂O-Na₂O 0.9, 2.0, and 50.0, resp., at 20.degree., heated 3 h at
 95.degree., filtered out, and dried to give a zeolite powder contg. 71

and
 2% of .ltoreq.5 and .gtoreq.8 .μ.-diam. particles which had excellent
 rinse.

ST zeolite **detergent** builder; clay zeolite synthesis

IT **Detergents**
 (builders for, synthetic zeolites as)

IT Zeolites, preparation
 RL: PREP (Preparation)
 (manuf. of synthetic, for **detergent** builders)

IT Clays, uses and miscellaneous
 RL: USES (Uses)
 (zeolite manufd. from, for **detergent** builders)

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